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ATTITUDES OF BIOLOGICAL LIMNOLOGISTS AND OCEANOGRAPHERS TOWARD SUPPOSED UNKNOWN ANIMALS IN LOCH NESS

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ABSTRACT: Three hundred American and Canadian Ph.D.-level scientists, including 100 biological limnologists and oceanographers, were surveyed on their attitudes toward the existence of supposed unknown animals inhabiting Loch Ness, Scotland, and the supposed Sasquatch (Bigfoot) of Northwest America. More than a third of the biological limnologists and oceanographers responding accepted "Nessie" as an animal "still unknown to science," and about 65 percent believed the subject should be studied by scientists; only 23 percent, however, supported the use of government funds for such research.

INTRODUCTION

Over the decades, there has been much speculation concerning the supposed animals inhabiting Loch Ness, Scotland (heretofore referred to as "Nessie"), first as to whether such animals actually exist, and second, as to what kind of animals they might be.

There has also been speculation as to what scientists, particularly freshwater and marine biologists, think of Nessie. It has generally been assumed, not altogether incorrectly, that most scientists do not take such reports seriously. This perception has probably resulted from scientists' on-the-record comments to newsmen during interviews following Nessie sightings. But what about their off-the-record personal beliefs, which they may not necessarily divulge to newsmen? A study was undertaken to investigate these attitudes, and the relationship between attitudes and disciplinary fields, at least in North America. The self-report method using specially designed questionnaires was used. We present here those parts of the survey results which will be of particular interest to students of the Loch Ness Monster problem.

TABLE 1.—Responses by biological limnologists and oceanographers on the cause of Nessie/Sasquatch reports.

	Nessie	Sasquatch	χ^2
Living animals "still unknown to science"	38.7%	12.5%	4.409 $p < .05$
Ordinary animals misidentified	48.4%	34.4%	nonsignificant
Imagination, hoaxes, myths	38.7%	78.1%	4.581 $p < .05$

METHOD

Three hundred Ph.D.-level American and Canadian scientists, all employed at universities or research centers, were surveyed on their attitudes toward Nessie and the supposed Sasquatch (Bigfoot) of Northwest America. One hundred of these were biological limnologists and oceanographers randomly selected from the 1976 *Membership Directory* of the American Society of Limnology and Oceanography. Half of the target individuals were mailed a Nessie questionnaire; the other half received a Sasquatch questionnaire. The other two groups (also with 100 individuals each) were physical anthropologists and physical chemists. All were guaranteed anonymity.

RESULTS

Of the 100 biological limnologists/oceanographers surveyed, 64 responded, but only 63 returned questionnaires; of these, 31 were on Nessie and 32 were on Sasquatch. Table 1 shows that almost 39 percent accepted Nessie as a real animal "still unknown to science," while an equal number believed it is simply a result of imagination, hoaxes, and myths; a majority, over 48 percent, believed it is a result of honest misidentifications of ordinary animals. Only 12.5 percent accepted Sasquatch, while over 78 percent attributed Sasquatch reports mainly to imagination, hoaxes, and myths.

The reasons why the majority of the respondents rejected the existence of Nessie is made clear in Table 2: the lack of specimens or osteological material. Table 3 shows that slightly over half of the respondents believed that the

TABLE 2.—Reasons for rejecting Nessie/Sasquatch.

	Nessie	Sasquatch
Lack of fossil evidence	-0-	46.9%
Lack of specimens (or parts of)	48.4%	84.4%
Lack of bones	32.3%	78.1%
Too large/too tall	3.2%	6.3%
Lack of environmental nutritional resources	12.9%	12.5%
Could not remain so long "undetected by science"	25.8%	46.9%
"Too bizarre" to consider	3.2%	-0-

TABLE 3.—Impact of Nessie/Sasquatch discovery "on science."

	Nessie	Sasquatch
Severe impact	6.5%	21.9%
Moderate impact	38.7%	53.1%
Slight impact	54.8%	21.9%

$\chi^2 = 7.807$, $df = 2$, $p < .025$.

TABLE 4.—Responses on whether scientists should undertake Nessie/Sasquatch research.

	Nessie	Sasquatch
Certainly should	29.0%	31.3%
Probably should	35.5%	21.9%
Uncertain	3.2%	12.5%
Probably should not	22.6%	28.1%
Certainly should not	6.5%	6.3%

TABLE 5.—Responses on whether government funds should be made available for Nessie/Sasquatch research.

	Nessie	Sasquatch
Certainly should	6.5%	15.6%
Probably should	16.1%	9.4%
Uncertain	12.9%	18.8%
Probably should not	35.5%	31.3%
Certainly should not	29.0%	25.0%

TABLE 6.—Biological limnologists and oceanographers who have seen/read scientific literature on Nessie/Sasquatch.

	Nessie	Sasquatch
Only seen scientific literature	9.7%	12.5%
Read scientific literature	77.4%	21.9%
Neither	12.9%	65.6%

TABLE 7.—Biological limnologists and oceanographers who are aware/have read Mackal/Napier books.

	Roy Mackal's book on Nessie	John Napier's book on Sasquatch
Aware of only	16.1%	21.9%
Have read	9.7%	-0-
Neither	74.2%	78.1%

discovery of Nessie would have only a "slight impact" on science, while only 22 percent believed the discovery of Sasquatch would have no more than a "slight impact."

As shown in Table 4, about 65 percent of the respondents indicated that scientists either "certainly" or "probably" should undertake Nessie research, while 53 percent supported research on Sasquatch. However, as shown in Table 5, only 23 percent supported government funding for Nessie research, and only 25 percent supported government funding for Sasquatch research. Thus, although Nessie is viewed as a more credible phenomenon than Sasquatch, support for research and government funding are about the same for both.

A majority of 77 percent of the respondents had read some scientific literature on Nessie (as opposed to popular literature), as shown in Table 6, but only 22 percent of the respondents had read any scientific literature on Sasquatch. Table 7 shows that only about a quarter of the respondents had read or were aware of Roy Mackal's book on Nessie (Mackal 1976), and that less than a quarter were aware—and none had read—John Napier's book on Sasquatch (Napier 1972). Over half of the Nessie respondents provided personal information on themselves (including name), and over one-third provided informative comments.

DISCUSSION

We can conclude that there is far less skepticism about the existence of Nessie than there is about the existence of Sasquatch among North American biological limnologists and oceanographers, although the existence of both is strongly doubted. Because of the lack of physical evidence, the majority believe that Nessie reports are based on honest misidentifications of ordinary animals, imagination, hoaxes, and myths, although they seem to bend over backward to support scientific investigation of the topic, provided government funds are not involved.

A similar survey of British marine and freshwater biologists has not been carried out. It would be of interest to compare the results of such a possible future survey with the results presented above.

An analysis of the data focusing on the Sasquatch responses by physical anthropologists is also available (Greenwell and King 1981a, 1981b). More complete survey results, including response rates by physical chemists and a selection of informative and abusive comments by the respondents, may also be found elsewhere (Greenwell and King 1980).

REFERENCES CITED

Greenwell, J. Richard, and James E. King
1980 Scientists and Anomalous Phenomena: Preliminary Results of a Survey. *Zetetic Schol-*

ar, Vol. 6: 17–29 (available from: Department of Sociology, Eastern Michigan University, Ypsilanti, Michigan 48197, U.S.A.).

Greenwell, J. Richard, and James E. King
1981a Attitudes of Physical Anthropologists Toward Reports of Bigfoot and Nessie. *Current Anthropology,* Vol. 22(1): 79–80.

Greenwell, J. Richard, and James E. King
1981b On the Taxonomic Status of Sasquatch: An Anthropological Consensus. *Northwest Anthropological Research Notes,* Vol. 15(1): 57–59.

Mackal, Roy P.
1976 *The Monsters of Loch Ness.* Chicago: Swallow Press.

Napier, John
1973 *Bigfoot: The Yeti and Sasquatch in Myth and Reality.* New York: E. P. Dutton.